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BRINKS HO	FER GILSON & LION	E	DIXON, THOMAS A		
P.O. BOX 103 CHICAGO, II	• •		ART UNIT	PAPER NUMBER	
			3629		
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Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
Office Action Summers	09/893,240	BARNES ET AL.	
Office Action Summary	Examiner	Art Unit	
The MAN INC DATE of this course is the	Thomas A. Dixon	3629	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the e	correspondence address -	·-
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a represent of the period for reply specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	.136(a). In no event, however, may a reply be tir oly within the statutory minimum of thirty (30) day I will apply and will expire SIX (6) MONTHS from te. cause the application to become ABANDONE	mely filed  ys will be considered timely.  the mailing date of this communica  D (35 U.S.C. & 133)	ation.
Status			
Responsive to communication(s) filed on <u>26 J</u> This action is <b>FINAL</b> . 2b)⊠ This      Since this application is in condition for allowed closed in accordance with the practice under	s action is non-final. ance except for formal matters, pro		s is
Disposition of Claims	\		
4)  Claim(s) 1-26 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-26 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o	awn from consideration.		
Application Papers			
<ul> <li>9) The specification is objected to by the Examine 10) The drawing(s) filed on 26 June 2001 is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E</li> </ul>	a) accepted or b) objected to e drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.12	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicati prity documents have been receive nu (PCT Rule 17.2(a)).	on No ed in this National Stage	
Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 8/01, 3/03.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:		

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#### **DETAILED ACTION**

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#### Claim Objections

1. Claim 1 is objected to because of the following informalities:

the word "compute" on line 10 should be "computer".

Appropriate correction is required.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "the form" lacks antecedent basis.

## Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 3. Claims 23-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention is not within the technological arts.
- 4. As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental

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premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

- 5. Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).
- 6. This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that

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the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

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- 7. The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See State Street Bank & Trust Co. at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, State Street abolished the Freeman-Walter-Abele test used in Toma. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in Toma because the invention in State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be nonstatutory. See Ex parte Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).
- 8. In the present application, though the claims are to gathering and automatically processing and sending data and an electronic baggage inspection, there does not appear to be any technology involved and could be merely be movement of paper and viewing baggage with an xray camera such as is well known in airline travel.

## Claim Interpretation

9. Claims directed to an Apparatus must be distinguished from the prior art in terms of structure rather than function, *In re Danly* 263 F.2d 844, 847, 120 USPQ 582, 531 (CCPA 1959).

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A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1657 (bd Pat. App. & Inter. 1987).

Thus the structural limitations of claim 15, including a computer interface, a computer memory are disclosed in Marjo as described herein.

Further the structural limitations of claim 16 and 18, including a camera linked to a computer are disclosed in Marjo as described herein.

Further the structural limitations of claim 19, including a feature, voice or facial recognition software are disclosed in Marjo as described herein.

Also as described the limitations of the claim and its dependents do not distinguish the claimed apparatus from the prior art.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 10. Claims 1-9, 11-13, 15-22 are rejected under 35 U.S.C. 102(a) as being anticipated by Marjo "Picking up the Pace. (Biometric technology in air travel)"

As per Claim 1.

Marjo discloses:

entering information identifying the passenger a first time into a computer interface, page 1, lines 5-6;

recording a first electronic image of the passenger, see page 1, lines 8-10;

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sending information identifying the passenger to a government or government agent in a destination country, see page 47-54;

entering information identifying the passenger a second time into a computer interface, see page 1, lines 11-19;

recording a second electronic image of the passenger, see page 1, lines 11-19; comparing the second image to a prior image of the passenger, see page 1, lines 16-19; and

routing the passenger in accordance with the data and an instruction from the government or government agent, see page 1, lines 12 and 47-54.

As per Claim 2.

Marjo further discloses the first electronic image is recorded in an originating country, see page 1, lines 8-10.

As per Claim 3.

Marjo further discloses the second electronic image is recorded in a destination country, see page 1, lines 11-19.

As per Claim 4.

Marjo further discloses the second electronic image is recorded on an aircraft, see page 1, line 33-35 (i.e. where the passenger goes, the recorded electronic image goes).

As per Claim 5.

Marjo further discloses the electronic image is selected from a group consisiting of a photograph, a fingerprint an iris scan and a voiceprint, see page 2, lines 33-34.

As per Claim 6.

Marjo further discloses the entering of flight information for the passenger into the computer interface, see page 1, lines 5-6.

As per Claim 7.

Marjo further discloses retrieving data of passengers scheduled for a flight from a first computer memory and storing the data in a second computer memory, see page 1, lines 8-10 and 33-35.

As per Claim 8.

Marjo further discloses the comparing is performed by a computer with software selected from the groups consisting of feature recognition software, voice recognition software and facial recognition software, see page 1, lines 17-18.

As per Claim 9.

Marjo further discloses taking a subsequent image of the passenger and comparing the subsequent image to the first electronic image, and routing the

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passenger according to the result of a comparison of the first electronic image and the subsequent image, see page 1, lines 11-12.

As per Claim 11.

Marjo further discloses electronically inspecting luggage of the passenger, making a record of the electronic inspecting, entering the record into the computer memory, sending to the government or government agent, and routing the baggage in accordance with the government or government agent, see page 2, lines 17-19.

As per Claim 12.

Marjo further discloses giving the passenger notice of an instruction of the government or government agent, see page 1, lines 48-49.

As per Claim 13.

Marjo further discloses no instruction is received from the government and the passenger is not required to process through customs, see page 1, lines 11-12.

As per Claims 15-22.

Marjo discloses a computer interface, see page 1, lines 5-6, and line 13 and a memory, see page 1, lines 17-18.

Marjo further discloses a camera linked to a computer, see page 1, lines 8-10.

Marjo further discloses a feature, voice or facial recognition software, see page 1, lines 17-18.

Also as described the limitations of the claim and its dependents do not distinguish the claimed apparatus from the prior art.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marjo

"Picking up the Pace. (Biometric technology in air travel)" in view of Official Notice.

As per Claim 10.

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Marjo discloses filling out forms on a computer and sending them to an agent of the government and routing the passenger according to a government or government agent, but does not specifically disclose filling out customs declaration forms.

Official Notice is taken that it is old and well known that any type of form can be filled out and sent, therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to fill out a customs declaration form in Marjo's system for the benefit of increased speed of processing through the airport.

12. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marjo

"Picking up the Pace. (Biometric technology in air travel)" in view of applicant's disclosure.

As per Claim 14.

Marjo does not specifically disclose if no instruction is received from the government or government agent and the passenger is automatically required to process through customs or immigration or both customs and immigration.

Applicant's application, page 1, lines 19-20 teaches that it is old and well known to automatically require the passenger to process through customs and immigration to control the flow of goods and people into a country.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to if no instruction is received from the government or government agent and the passenger is automatically required to process through customs or immigration or both customs and immigration to control the flow of goods and people into a country.

13. Claims 23-24 are rejected under 35 U.S.C. 102(a) as being anticipated by Pugliese, III (6,044,353) in view of Sweatte (6,335,688).

As per Claim 23.

Pugliese, III ('353) discloses a passenger, baggage, and baggage of the passenger, and information concerning the passenger and baggage, see abstract;

gathering information and sending information concerning the passenger and baggage of the passenger, wherein the information concerning the passenger and the baggage of the passenger is automatically gathered and processed, see column 4, lines 16-35;

sending the baggage through an electronic baggage inspection, sending the baggage to the second country, and routing the baggage to a location selected from the group consisting of customs, a baggage claim area, and a connecting flight of a passenger, see column 4, lines 36-52;

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sending the passenger from an origin to a destination, and sending the passenger to further processing selected from the group consisting of customs, immigration and no further processing, see column 4, line 65 – column 5, line 19.

Pugliesse III ('353) does not specifically disclose sending the passenger from a first country to the second country and information sent to a government official of a second country.

Sweatte ('688) teaches notification of immigration or customs, see abstract, for the benefit of letting airline and security personnel know when an unexpected or unwanted event or person is in the system.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to notifiy immigration or customs, as taught by Sweatte, for the benefit of letting airline and security personnel know when an unexpected or unwanted event or person is in the system.

As per Claim 24.

Pugliese, III ('353) further discloses scheduling travel of a passenger and transferring data concerning the passenger from a first computer memory to a second computer memory, see column 5, line 61 – column 6, line 14.

13. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pugliese III (6,044,353) in view of Sweatte (6,335,688) further in view of Official Notice.

As per Claim 25.

Pugliese III ('353) discloses filling out forms on a computer, but does not specifically disclose filling out customs declaration forms.

Official Notice is taken that it is old and well known that any type of form can be filled out and sent, therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to fill out a customs declaration form in Pugliese III's system for the benefit of increased speed of processing through the airport.

14. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pugliese III (6,044,353) in view of Sweatte (6,335,688) further in view of applicant's disclosure.

As per Claim 26.

Pugliese, III ('353) further discloses the passenger proceeds to an immigration booth upon arrival in the second country to automatically verify his or her identification and to receive instructions for proceeding.

#### Prior Art Made of Record

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

WO 01/09796 to Mann is the closest foreign art and describes the system discussed in Biometrics takes Flight.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Dixon whose telephone number is (703) 305-4645. The examiner can normally be reached on Monday - Thursday 6:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (703) 308-2702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas A. Dixon Primary Examiner Art Unit 3629